

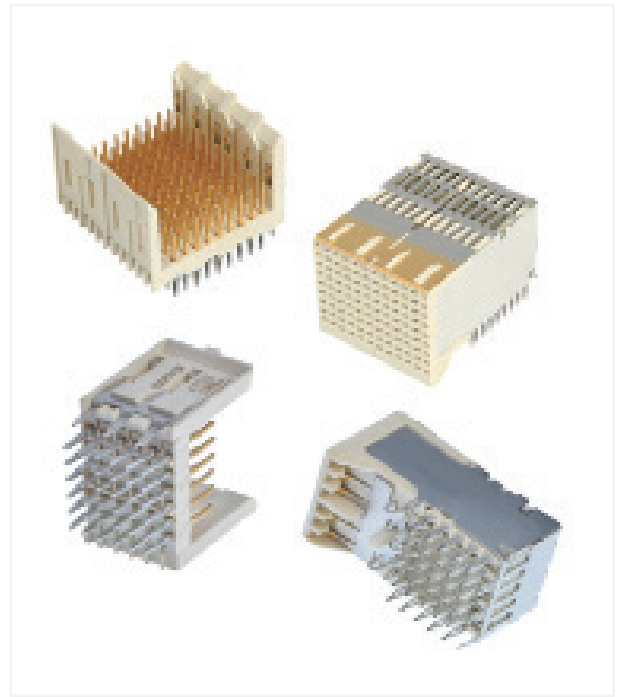
METRAL® 1000 SERIES

OVERVIEW

FCI's Metral® 1000 Series is a high speed 2mm backplane connector system consisting of Right-Angle receptacles and vertical headers. The 1000 Series features a unique stripline structure in the receptacle and outer ground shields in the header. Apart from these features, the connectors are similar to the FCI Standard Metral® Connectors. The stripline structure allows the Metral® 1000 Series to have improved signal performance when routed in either a single-ended or a differential pair configuration.

The Metral® 1000 Series is available in 5x6 and 8x12 module sizes with shrouds for midplane applications. The system also features dedicated ground rows. Two-, three-, and four- module monoblocks for the 5-row connector are available.

Metral 1000 Series connectors are designed to conveniently stack end-to-end with other FCI Metral products. The Metral 1000 Series Right Angled Receptacles are also available with Pin in Paste Termination.

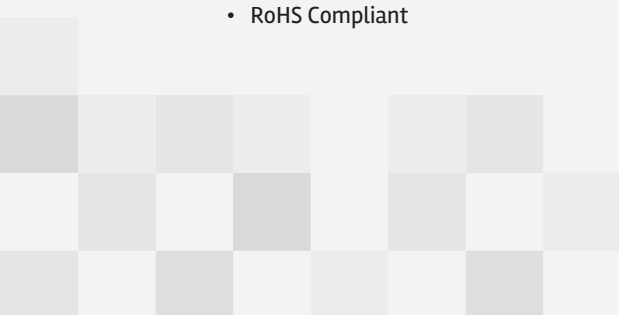


FEATURES

- Fully shielded strip-line transmission structure for Receptacles & Outer Ground Shields for Headers
- Stackable end-to-end with other FCI Metral® Products
- All contacts can be used for signals since the grounds are built into the receptacle strip-line and header shield structure
- Available in 5 and 8-row configurations
- Press-fit Headers and Receptacles
- Receptacles also available with PIP Termination
- Dual-Beam Receptacle contacts
- Various Header loading patterns available
- Rear Plug up Options
- 200 Mating Cycles
- RoHS Compliant

BENEFITS

- Reduced Cross Talk & Improved Signal Performance (Less than 5% multi-line active NEXT @ 200ps rise time in differential applications)
- No loss of Pitch and Adaptable to the Metral® Platform
- Higher Contact Density
- Flexibility of Connector Size
- Easy Application on Boards and Repair
- Application Flexibility
- Ensure Reliable Connection
- Customized Selection
- Midplane Application
- Better Durability
- Meet environmental, health and safety requirements





TECHNICAL INFORMATION

MATERIALS

- Housings: High-temperature, glass filled LCP, UL94V-0
- Receptacle Contacts: Copper Alloy
- Header Pins: Copper Alloy
- Ground Shields: Copper Alloy
- Plating:
 - Contact Area: per Telcordia™ GR-1217-core for Central Office and Uncontrolled Environment
 - Press-fit Tails: Matt tin

ELECTRICAL PERFORMANCE

- Current Rating: 1A when all contacts are powered or 3A when one contact is powered at a 30°C max. temperature rise
- Contact Resistance: 20mΩ max.
- Insulation Resistance: 1000MΩ min.
- Signal Integrity: Data and SPICE models are available at www.fci.com.

ENVIRONMENTAL

- Operating Temperature: -65°C to +105°C

MECHANICAL PERFORMANCE

- Mating Force: 0.55 N max. per contact pair including ground and shield contacts
- Withdrawal Force: 0.20 N min. per contact pair including ground and shield contacts

SPECIFICATIONS

- IEC 61076-4-104
- FCI Product Specifications
 - GS-12-110 for 5-row connectors
 - GS-12-134 for 8-row connectors
- FCI Application Specifications
 - GS-20-010 for headers and shrouds
 - GS-20-017 for receptacles

SPECIFICATIONS

- Recognized per UL/CSA
- Qualified per Telcordia GR-1217-CORE, Central Office (CO) and Uncontrolled Environment (UE)

PACKAGING

- Tubes – Press fit
- Tape&Reel – Pin in Paste

TARGET MARKET / APPLICATIONS

- Communications
 - Transmission
 - Access
 - Switches
 - Routers
- Data
 - Servers
 - Storage Enclosures
- Industrial, Instrumentation and Medical
 - Rack-Based Systems

PART NUMBERS

Number of Rows & Positions	For Daughter Card Thickness	Header	Receptacle	Shroud
5-Row 5x6	1.27mm (0.050in.) – 2.54mm (0.100in.)	84817-XXX	84688-XXX/10082662-102LF	73993-XXX
5-Row 5x6	1.27mm (0.050in.) – 2.54mm (0.100in.)	73983-XXX	73981-XXX	73993-XXX
5-Row 5x6	2.54mm (0.100in.) – 3.40mm (0.134in.)	84881-XXX	84854-XXX	84882-XXX
8-Row 8x12	1.27mm (0.050in.) – 3.40mm (0.134in.)	74983-XXX	74981-XXX	74993-XXX

Note: All Dash numbers – XXX represent available options such as plating types, tail lengths for headers. Lead-free and RoHS-compliant products are designed by the addition of LF as a suffix to the dash number.

BPLMETRALI015EA4

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [High Speed/Modular Connectors](#) category:

Click to view products by [Amphenol](#) manufacturer:

Other Similar products are found below :

[650827-1](#) [74040-1346](#) [1410191-1](#) [1410337-1](#) [1410368-3](#) [1410964-2](#) [1410326-3](#) [1410367-3](#) [1410971-4](#) [1467833-1](#) [2000877-1](#) [2000878-1](#)
[2041314-1](#) [2065387-1](#) [2187307-1](#) [163P](#) [1934290-1](#) [2000875-1](#) [2065917-1](#) [2102736-2](#) [FSR-40](#) [2169868-2](#) [22354-8](#) [437-5040-000](#) [5-](#)
[1393565-0](#) [039-0246-000](#) [0740618502](#) [0761601016](#) [0784461022](#) [10123159-12ELF](#) [030-2415-003/100 PK](#) [030-7380-004](#) [030-2494-001](#)
[532939-1](#) [5532901-3](#) [3-1469268-7](#) [74748-102LF](#) [73670-0247](#) [10041743-101LF](#) [10066670-100002LF](#) [1-533915-1](#) [249-4515-000](#) [7-1469373-](#)
[3](#) [DL2-2J/S](#) [2000713-8](#) [2000713-7](#) [3011-21](#) [757105208](#) [EBTF-4-10-2.0-S-RA-1](#) [430305-001](#)